Introduction

The Occupational Safety and Health Administration (OSHA) bloodborne pathogens standard consists of regulations designed to further the safety measures of universal precautions and ensure the health and safety of employees by reducing the risk of occupational exposure to bloodborne pathogens in health care settings.

The Agency has determined that, by strictly following these regulations, health care facilities will be successful in their efforts to prevent the transmission of bloodborne pathogens and the spread of bloodborne diseases. Among the safety methods listed in the OSHA standard are mandatory Hepatitis B vaccination, training on the hazards of bloodborne pathogens and universal precautions, follow-up procedures after an HIV or HBV exposure incident, mandatory use of personal protective equipment (PPE)--gloves and gowns--where there is exposure to hazards, sanitary regulations for work settings, compulsory use of non-leaking and puncture-proof waste containers and tags or labels for containers or areas contaminated with potentially hazardous materials.

Selected OSHA information is provided in the appendices, including the updated bloodborne pathogens standard, questions and answers of concern to physicians, and specific guidance on how to prevent needlestick injuries. Additional OSHA information on the bloodborne pathogens standard, related regulations, and compliance requirements may be obtained at the OSHA website: www.osha.gov and from any of the OSHA regional offices. For further help, you may also contact ACP's OSHA staff contact at 800-338-2746 ext. 4511.

Twenty-six states and territories have OSHA-approved state plans for minimizing risk of exposure to bloodborne pathogens. OSHA has deemed the standards of these states/territories to be at least as effective as OSHA’s. These states/territories are: Alaska, Arizona, California, Connecticut, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virgin Islands, Virginia, Washington and Wyoming. (Note: CT, NJ, NY, and VI plans cover only public sector employment.) If you live in a state plan state, contact your state plan for more information.

Background

Certain pathogenic microorganisms found in the blood of infected persons--bloodborne pathogens--can be transmitted from the infected individual to others by blood or other body fluids. Hepatitis B and HIV are two of the most significant bloodborne diseases; Hepatitis C, delta hepatitis, syphilis, and malaria are others. In health care settings, the most commonly reported methods of transmission are: cuts or sticks incurred upon sharps or needles contaminated with blood or body fluids, contact between infectious body fluids and preexisting skin lesions, and infectious body fluid contamination of the eyes, nose and mouth.

Because it is the exposure to blood or other body fluids that carries the risk of infection, individuals whose occupational duties expose them to blood and other potentially infectious
materials are at risk of becoming infected with these bloodborne pathogens. Efforts such as compliance with universal precautions, the use of protective clothing and gloves, sterilization procedures and cautious control measures when performing invasive procedures, reduce blood exposure and minimize puncture injuries in the workplace setting which, in turn, reduce the risk of transmission of all bloodborne diseases.

In 1991, the Occupational Safety and Health Administration (OSHA) issued a Bloodborne Pathogens Standard to protect workers from occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other bloodborne pathogens. OSHA concluded that minimization or elimination of this risk could be achieved through implementation of a combination of engineering and work practice controls, personal protective clothing and equipment (PPE), training, medical surveillance, Hepatitis B vaccination, signs and labels and other provisions.

Advances in the technology of preventing exposure to blood led Congress to pass the Needlestick Safety and Prevention Act in November 2000. This law mandated additions to OSHA’s Bloodborne Pathogens Standard which went into effect on April 18, 2001. The revised standard requires employers to consider safer needle devices when they conduct their annual review of their exposure control plan and to include employees in identifying and choosing the devices. Safer sharps are considered appropriate engineering controls, the best strategy for worker protection.

Industry Profile

Industries where workers are in contact with or handle blood and other potentially infectious materials will be affected by the OSHA bloodborne pathogens standard. These include, but are not limited to, offices of physicians (including ambulatory medical services), medical and dental laboratories and hospitals.

Offices of Physicians: Frequency and type of exposure in a physician's office depends on the type of practice and the distribution of tasks. While some physicians' offices have contracted out blood analysis work, others have established office laboratories (POLs). It is likely that phlebotomy is performed in a large number of offices, especially those with laboratory facilities. Injections are also commonly administered. Physicians performing gynecological examinations or examining patients for sexually transmitted diseases are most certainly at risk. Routine physical exams can also put the examining physician at risk. Other types of procedures commonly encountered which place physicians and physicians' assistants at risk are treatment of lacerations, abrasions, and compound fractures. Another activity which could involve occupational exposure to blood in the physician's office is housekeeping--cleaning of work stations, laundry, etc.

Medical and Dental Laboratories: Procedures that most often result in exposure in the laboratory involve specimen collection and specimen processing. Workers are exposed through needlesticks, spills, or the improper use of laboratory equipment, such as the centrifuge, which can cause blood or other collected fluids to spray onto the technician using it.
Hospitals: Most hospitals perform a great variety of services, and there are many different exposure scenarios. The most common is needlesticks, with the greatest potential for exposure occurring during needle recapping. Hospital procedures that are associated with frequent exposure include phlebotomy, IV line placement, bronchoscopy, intubation, airway suction, endoscopy, colonoscopy, and proctosigmoidoscopy. Areas with the greatest potential for exposure include the emergency room, surgical suite, hemodialysis center, intensive care unit, and laboratory. Laundry workers and janitors may also be exposed, particularly when handling soiled linen or refuse.

Benefits

OSHA's standard for reducing worker exposure to bloodborne pathogens is based on the adoption of universal precautions as a method of infection control. This approach is fundamentally different from traditional procedures that isolate known infectious individuals and materials in the health care setting. Universal precautions assumes that all human blood and body fluids are potentially infectious for HIV, HBV, and other bloodborne pathogens. The rationale for this approach is that carriers of these diseases are not always identifiable in the health care setting, and that contaminated materials are not always properly labeled. Thus, the exposed worker can be at great risk without warning. Since the Bloodborne Pathogens Standard went into effect, HBV vaccination has proven immensely successful in preventing the spread of Hepatitis B Virus to employees in health care settings.

Requirements

The overall purpose-- and greatest benefit-- of implementing the standard is the elimination of disease transmission. In achieving this goal, employers must:
(a) Develop an exposure control plan. This written plan identifies the tasks and/or positions associated with occupational exposures to blood or other potentially infectious materials and documents the schedule of implementation of the measures that will be used to reduce potential risk. Employers will also be required to develop procedures to evaluate the circumstances surrounding exposure incidents, a critical step in reducing associated risk.
(b) Offer HBV vaccine free of charge to all employees with risk of occupational exposure to blood or other potentially infectious materials. HBV vaccination is a means of achieving substantial reduction in the risk of infection for non-immune employees.
(c) Provide confidential post exposure evaluation and treatment, which includes testing to determine whether there has been transmission of infection, and follow-up treatment and counseling. Safe and effective post-exposure prophylaxis, and hepatitis B immune globulin (HBIG) injections will be administered free of charge to non-immune employees experiencing exposure incidents. Employers who are physicians must refer exposed employees to another healthcare professional for treatment to protect their confidentiality.
(d) Provide post exposure counseling, as it will reduce risk through modification of the behavior of workers acquiring infection. Counseled employees are less likely to infect sexual partners or neonates.
(e) Provide training in the seriousness of exposure risk. Studies have demonstrated that, as understanding of risk increases, so does abatement of risk.
(f) Provide personal protective equipment (PPE) free of charge to all employees occupationally at risk of exposure to potentially infectious materials, including cleaning, maintenance, and disposal.

**OSHA Inspections**

OSHA says it will not inspect physician offices unless a complaint has been filed. The agency has inspected very few physician offices so far and, as expected, most of the inspections have been in response to complaints made to OSHA by employees or others.

According to OSHA data, physician offices were most commonly cited for:
- not having a written exposure control plan;
- failure to provide employees free of charge hepatitis B vaccinations, training or personal protective equipment; and
- lack of access to employee exposure and medical records.

**What to Do When an Inspector Comes**

When inspectors arrive, let them in without delay. Technically, physicians may require a search warrant. They are easily attainable, but inspectors will return looking to cite the physician. It is better for the physician to work with the inspector. If the physician or the staff assistant in charge of OSHA compliance is out of the office, it is reasonable to reschedule the review.

OSHA reserves the right to inspect laboratories without obtaining a search warrant under three circumstances: where an emergency circumstance exists creating urgent need for an immediate search, under voluntary consent by the employer, and when the inspector can see clear violations although being denied access to the workplace.

**Beware of Con Artists and Salespeople Posing as OSHA Inspectors**

OSHA inspectors are required to show ID cards upon arrival at the physician office. Beware of con artists. No money should ever change hands during the inspection. The inspector should never try to sell you something, offer to correct violations for a fee or attempt to collect fines. There is no such thing as OSHA-approved products and physicians should also be careful about products claiming to meet "OSHA criteria and standards." Call your local OSHA office if you have any doubts about an inspector.

**What to Expect During an Inspection**

It is hard to predict what OSHA inspectors will focus on during an inspection. However, the inspection itself must follow a set process.

*Opening conference:* Prior to the inspection, OSHA inspectors are required to explain the purpose of the visit, the scope of the inspection, and the standards that apply. Employees have the right to attend the opening conference as well as the rest of the inspection. If the search is a result of a complaint, the inspector must provide a copy of the complaint form on request. The name of the complainer will be withheld. The physician can try to limit the search to the restricted area pertaining to the complaint itself. However, if the physician allows a complete
investigation of the entire office, he or she cannot claim the search was too broad after citations are assessed.

*Walk around:* During the actual inspection, the inspector will be checking to see if the office meets the specific requirements of the bloodborne pathogens standard. The standard mandates:

- Written exposure control plan
- Engineering/work practice controls
- Personal protective equipment
- Housekeeping practices
- Labeling/bloodborne communication
- Post-exposure procedures
- Employee training
- Recordkeeping
- Waste disposal
- HBV vaccination

The first thing inspectors will look for is the written exposure control plan and evidence that everyone understands it. They will also review the office's training manual to see that the physician has documented employee training sessions. Inspectors reserve the right to take pictures as well as talk to members of the office staff. Employees are a prime source of information for inspectors so physicians should make sure all employees are familiar with the standards, the office's exposure control plan, and other specific requirements that pertain to their position. Finally, be aware that the inspector can cite violations of other OSHA safety standards that may apply during a bloodborne pathogens inspection.

*Closing conference:* During the closing conference, the inspector will discuss his or her preliminary findings, whether any citations are likely to be issued and what fines will be assessed. If there is a citation recommendation, the physician should ask how to eliminate the alleged violation or problem. OSHA says it will automatically reduce by 60 percent any fine given to offices with 25 or fewer employees. Larger practices will receive a smaller percent reduction. Hospitals and big clinics will have to pay the full fine. Practices of all sizes can reduce the fine another 25 percent for good-faith efforts to correct violations and up to 10 percent for having had no violations within the previous three years.

**Appeals**

Physicians have the right to discuss any cited violation with the OSHA area director or the independent Occupation Safety and Health Review Commission in an informal conference within 15 working days of receiving the citation. If the physician decides to appeal a citation, ACP advises that the physician have his or her attorney draft the letter to OSHA.
Appendix I  
Revision to OSHA's Bloodborne Pathogens Standard  
Technical Background and Summary, April 2001  
www.osha.gov/needlesticks/needlefact.html

Background  
The Occupational Safety and Health Administration published the Occupational Exposure to Bloodborne Pathogens standard in 1991 because of a significant health risk associated with exposure to viruses and other microorganisms that cause bloodborne diseases. Of primary concern are the human immunodeficiency virus (HIV) and the hepatitis B and hepatitis C viruses.

The standard sets forth requirements for employers with workers exposed to blood or other potentially infectious materials. In order to reduce or eliminate the hazards of occupational exposure, an employer must implement an exposure control plan for the worksite with details on employee protection measures. The plan must also describe how an employer will use a combination of engineering and work practice controls, ensure the use of personal protective clothing and equipment, provide training, medical surveillance, hepatitis B vaccinations, and signs and labels, among other provisions. Engineering controls are the primary means of eliminating or minimizing employee exposure and include the use of safer medical devices, such as needleless devices, shielded needle devices, and plastic capillary tubes.

Since the bloodborne pathogens standard was published many different medical devices have been developed to reduce the risk of needlesticks and other sharps injuries. These devices replace sharps with non-needle devices or incorporate safety features designed to reduce injury. Despite these advances in technology, needlesticks and other sharps injuries continue to be of concern due to the high frequency of their occurrence and the severity of the health effects.

The Centers for Disease Control and Prevention estimate that healthcare workers sustain nearly 600,000 percutaneous injuries annually involving contaminated sharps. In response to both the continued concern over such exposures and the technological developments which can increase employee protection, Congress passed the Needlestick Safety and Prevention Act directing OSHA to revise the bloodborne pathogens standard to establish in greater detail requirements that employers identify and make use of effective and safer medical devices. That revision was published on Jan. 18, 2001, and became effective April 18, 2001.

Summary  
The revision to OSHA's bloodborne pathogens standard added new requirements for employers, including additions to the exposure control plan and keeping a sharps injury log. It does not impose new requirements for employers to protect workers from sharps injuries; the original standard already required employers to adopt engineering and work practice controls that would eliminate or minimize employee exposure from hazards associated with bloodborne pathogens. The revision does, however, specify in greater detail the engineering controls, such as safer medical devices, which must be used to reduce or eliminate worker exposure.
Exposure Control Plan
The revision includes new requirements regarding the employer's Exposure Control Plan, including an annual review and update to reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens. The employer must:

- take into account innovations in medical procedure and technological developments that reduce the risk of exposure (e.g., newly available medical devices designed to reduce needlesticks); and
- document consideration and use of appropriate, commercially-available, and effective safer devices (e.g., describe the devices identified as candidates for use, the method(s) used to evaluate those devices, and justification for the eventual selection).
- No one medical device is considered appropriate or effective for all circumstances. Employers must select devices that, based on reasonable judgment:
  - will not jeopardize patient or employee safety or be medically inadvisable; and
  - will make an exposure incident involving a contaminated sharp less likely to occur.

Employee Input
Employers must solicit input from non-managerial employees responsible for direct patient care regarding the identification, evaluation, and selection of effective engineering controls, including safer medical devices. Employees selected should represent the range of exposure situations encountered in the workplace, such as those in geriatric, pediatric, or nuclear medicine, and others involved in direct care of patients. OSHA will check for compliance with this provision during inspections by questioning a representative number of employees to determine if and how their input was requested.

Documentation of employee input
Employers are required to document, in the Exposure Control Plan, how they received input from employees. This obligation can be met by:

- Listing the employees involved and describing the process by which input was requested;
- Presenting other documentation, including references to the minutes of meetings, copies of documents used to request employee participation, or records of responses received from employees.

Recordkeeping
Employers who have employees who are occupationally exposed to blood or other potentially infectious materials, and who are required to maintain a log of occupational injuries and illnesses under existing recordkeeping rules, must also maintain a sharps injury log. That log will be maintained in a manner that protects the privacy of employees. At a minimum, the log will contain the following:

- the type and brand of device involved in the incident;
- location of the incident (e.g., department or work area); and
- description of the incident

The sharps injury log may include additional information as long as an employee's privacy is protected. The format of the log can be determined by the employer.
OSHA’s Bloodborne Pathogens Standard applies to all employers with employees who have occupational exposure to blood or other potentially infectious materials (OPIM), regardless of how many workers are employed. However, workplaces with 10 or fewer employees are exempt from OSHA recordkeeping requirements and are also exempt from recording and maintaining a Sharps Injury Log. (See 29 CFR 1904 for applicability of recordkeeping requirements). All other applicable provisions of the Bloodborne Pathogens Standard still apply.

Modification ofDefinitions
The revision to the bloodborne pathogens standard includes modification of definitions relating to engineering controls. Two terms have been added to the standard, while the description of an existing term has been amended.

Engineering Controls
Engineering Controls include all control measures that isolate or remove a hazard from the workplace, such as sharps disposal containers and self-sheathing needles. The original bloodborne pathogens standard was not specific regarding the applicability of various engineering controls (other than the above examples) in the healthcare setting. The revision now specifies that "safer medical devices, such as sharps with engineered sharps injury protections and needleless systems" constitute an effective engineering control, and must be used where feasible.

Sharps with Engineered Sharps Injury Protections
This is a new term which includes nonneedle sharps or needle devices containing built-in safety features that are used for collecting fluids or administering medications or other fluids, or other procedures involving the risk of sharps injury. This description covers a broad array of devices, including:

- syringes with a sliding sheath that shields the attached needle after use;
- needles that retract into a syringe after use;
- shielded or retracting catheters
- intravenous medication (IV) delivery systems that use a catheter port with a needle housed in a protective covering.

Needleless Systems
This is a new term defined as devices which provide an alternative to needles for various procedures to reduce the risk of injury involving contaminated sharps. Examples include:

- IV medication systems which administer medication or fluids through a catheter port using non-needle connections; and
- jet injection systems which deliver liquid medication beneath the skin or through a muscle.
Appendix II
Needlestick Questions and Answers
From How to Prevent Needlestick Injuries: Answers to Some Important Questions
(Figures, diagrams, and additional information can be seen online at:
http://www.osha.gov/Publications/OSHA3161/osha3161.html)

Introduction
As an employer of health care workers, you want and need to provide a safe and healthful workplace for your employees. In 1991, OSHA published the Bloodborne Pathogens Standard, Title 29 Code of Federal Regulations, Part 1910.1030, to protect workers from exposures to bloodborne illnesses. Because needlestick injuries are a major cause of these exposures in the health care setting, it is important to recognize that there are work practices and engineering controls to help reduce these exposures and injuries.

Why do I need to worry about needlesticks?
If you’re an employer of health care workers who are potentially exposed to blood and contaminated needles, you should know that there are an estimated 800,000 needlesticks each year in the U.S. About 2 percent, or 16,000, of these are likely to be contaminated with the Human Immunodeficiency Virus (HIV). Needlestick injuries account for up to 80 percent of accidental exposures to blood. Nurses in hospitals are the most frequently injured.

When might my employees be injured by a needlestick?
Needlestick injuries may occur when employees dispose of needles, collect and dispose of materials used during patient care procedures, administer injections, draw blood, or handle trash or dirty linens where needles have been inappropriately discarded.

Isn’t there just a small chance of such an injury?
Data from 63 hospitals show that the overall rate of such injuries is 27 per 100 occupied beds annually. Nurses had the most frequent exposures (49.7 percent); physicians ranked second (12.6 percent); nursing assistants accounted for 5.3 percent, and housekeepers, 5.1 percent. Hollow-bore needles are the cause of injury in 68.5 percent of all cases.

What can happen from a needlestick?
More than 20 pathogens have been reportedly transmitted from needlesticks. The most serious are the transmission of Hepatitis C (HCV), Hepatitis B (HBV), and HIV. In fact, the risk of acquiring HBV or HCV from a contaminated needlestick is greater than for HIV.

Why is the risk greater from Hepatitis B and C than from HIV?
The risk of acquiring an infection has to do with the prevalence of these diseases in the patient population at large. For example, an estimated 1.25 million people in the U.S. are chronically infected with HBV and 6,000 die each year from HBV-related liver disease. HCV also is a major cause of chronic liver disease worldwide. In 1997, there were an estimated 4 million people in the U.S. infected with HCV. As many as 85 percent of all HCV-infected persons develop chronic hepatitis and are at increased risk for cirrhosis and primary hepatocellular carcinoma. Liver failure from Hepatitis C is the leading reason for liver transplants in the U.S.
So, do I still need to worry about HIV exposures for employees?
Yes. The total number of occupationally acquired HIV infection in health care workers continues to increase each year. Of the 52 such cases documented during 1996, 45 were from needlesticks or cuts.

How can I protect employees against potential exposures?
Make sure that employees use universal precautions engineering and work practice controls, and personal protective equipment to reduce their exposure to bloodborne pathogens, as required by OSHA’s Bloodborne Pathogens Standard.

Can’t needles penetrate most personal protective equipment?
You’re correct. Most personal protective equipment can be easily penetrated by needles. Most needlestick injuries, however, result from unsafe needle devices rather than carelessness by health care workers. Safer needle devices have been shown to significantly reduce needlesticks and exposures to potentially fatal bloodborne illnesses.

What’s a safer needle device?
A safer needle device has built-in safety controls to reduce needlestick injuries before, during, or after use and to make needlesticks less likely.

Will these devices prevent needlestick injuries?
Not all needlestick injuries are preventable, but the number can be reduced by using devices containing needles with built-in safety features or other devices that eliminate the use of needles altogether. Using needleless IV connectors, self re-sheathing needles, or blunted surgical needles, for example, can help reduce the risk of injury. In fact, almost 83 percent of injuries from hollow bore needles are potentially preventable.

How do these devices work?
In general, properly designed devices should (1) provide a barrier between the hands and the needle after use; (2) allow or require the worker’s hands to remain behind the needle at all times; (3) have safety features integral to the device itself rather than as accessories; (4) be in effect before disassembly and remain in effect after disposal to protect downstream workers; (5) be simple and easy to operate, with little or no training; and (6) not interfere with the delivery of patient care.

Are there specific safety features I need to know about?
Yes. For example, it is good to know whether the feature is active or passive or whether the engineering control is part of the device. Types of safety features include the following:
- Passive safety features remain in effect before, during, and after use; workers do not have to activate them. Passive features enhance the safety design and are more likely to have a greater impact on prevention.
- Active devices require the worker to activate the safety mechanism. Failure to do so leaves the worker unprotected. Proper use by the health care workers is the primary factor in the effectiveness of these devices.
- An integrated safety design means that the safety feature is built in as an integral part of the device and cannot be removed. This design feature is usually preferred.
• An accessory safety device is a safety feature that is external to the device and must be
carrier to, or be temporarily or permanently fixed to, the point of use. This design also is
dependent on employee compliance, and according to some researchers, is less desirable.

Does OSHA require the use of specific devices?
No. OSHA does not require employers to institute specific devices, but it does require that
employers evaluate the effectiveness of existing controls and review the feasibility of instituting
more advanced engineering controls. Further, OSHA’s Bloodborne Pathogens Standard requires
that employers establish a written exposure control plan as well as engineering and work practice
controls to eliminate or minimize employee exposure. Additionally, employers are required to
provide post-exposure follow-up if an employee sustains a needle puncture and to record the
injury on the OSHA 200 log in some cases.

What steps do I need to take to have a comprehensive prevention program and to
implement safer needle devices?
As an employer of health care workers, you have the flexibility to develop individual worksite-
specific needlestick prevention programs to protect employees. Such a program would mean that
you have a mechanism in place to select and evaluate safer medical devices in a systematic
manner. In evaluating safer needlestick devices, ideally you should evaluate your workplace and
base your choices for these types of products on the following:
• The needs of the primary users
• The need of the patients who must continue to receive safe, efficient, and comfortable
care. (Workers are likely to reject products that they think will interfere with patient
care.)

In addition, a comprehensive needlestick prevention program might include the following:
• Creating a multidisciplinary team to investigate and assess needlestick incidents.
• Defining prevention priorities on the basis of collection and analysis of an institution’s
injury data.
• Developing design and performance criteria for product selection according to needs for
patient care and health care worker safety.
• Planning and implementing an evaluation of products in clinical settings.

To evaluate and select appropriate safer needle devices, you also should review available
needlestick injury data including the personnel involved, the devices used, and the circumstances
and frequency of needlestick events. This information can help in determining how employees
can maximally benefit from a product change to safer needle devices. Although not required by
OSHA, the collection and evaluation of complete needlestick injury data are key to identifying
injury patterns and then implementing an effective abatement plan.
APPENDIX III
OSHA Resources

How can I get more information or assistance on this topic?
For OSHA assistance, you can contact the bloodborne pathogens coordinator in your nearest regional or area office. For more information see OSHA online resources in the appendix. OSHA also provides other services and assistance, including:

- Consultation Program – OSHA’s On-Site Consultation Service offers free and confidential advice to small and medium-sized businesses in all states across the country. Consultation services are totally separate from enforcement and do not result in penalties or citations. Comprehensive assistance includes an onsite appraisal of all work practices and environmental hazards and all aspects of the employer’s present job safety and health program. For more information, see Appendix III.

- Internet: OSHA standards, interpretations, directives, interactive software, compliance assistance materials, and additional information are available online. For more information see Appendix III.


- Grants – OSHA gives training and education grants to various non-profit groups to develop programs to help small businesses establish safety and health programs. For more information, see Training on OSHA’s website.

- Mentoring – OSHA’s Voluntary Protection Programs (VPP) recognize worksites where employers and employees work together to achieve safety and health excellence. Small firms can be matched with and mentored by a VPP site that will share its safety and health experience and expertise. For more information, contact the VPP coordinator in your nearest OSHA regional office.

- Publications – OSHA has many published materials, including specific topics for small businesses that are available online under Publications on OSHA’s website.

- Small business assistance – OSHA’s Office of Small Business Assistance administers OSHA’s nationwide On-Site Consultation Program, and serves as liaison and a point of contact within the agency for small businesses.
• State Plans – Twenty-five states and territories operate their own federally approved occupational safety and health programs. The states conduct most OSHA enforcement through their own standards, which are at least as effective as Federal OSHA’s, but may have different or additional requirements. Many states offer additional programs of assistance to small businesses. For more information, see Appendix III.

• Training and Education – OSHA’s Training Institute and Education Centers provide basic and advanced courses in safety and health. OSHA’s area offices offer information services, such as audiovisual aids, technical advice, and speakers for special engagements. A list of courses can be found under Training on OSHA’s website.

**Emergencies** – For life-threatening situations only, call 800-321-OSHA. Complaints will go immediately to the nearest OSHA area or state office for help.

**Online OSHA Resources:**


APPENDIX IV
Other Resources and Websites

Other Resources:

**American Nurses Association (ANA)** – Downloadable Needlestick Prevention Guide includes a model exposure control plan.

**Centers for Disease Control and Prevention (CDC)** -
Information on bloodborne pathogens in healthcare settings.
http://www.cdc.gov/ncidod/dhqp/bp.html

**Medical Laboratory Evaluation (MLE)** - Basic OSHA Compliance Program includes a customizable exposure control plan, OSHA Watch Newsletter, training DVD, MSDS binder and more.  http://www.acponline.org/running_practice/mle/edu_cat.htm

**National Institute for Occupational Safety and Health (NIOSH)** – An overview of state needle safety legislation.
http://www.cdc.gov/niosh/topics/bbp/ndl-law.html

**The Service Employees Internal Union (SEIU)** – Downloadable Guide to Preventing Needlestick Injuries includes tools for evaluating safety devices.
http://www.seiu.org/pdfs/NdstkBk.pdf